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Date: 5/23/2011 3:39 PM
Subject: Notice of Drafting Comments - Enterococci bacteriological indicator

Dear Ms. Kirkland,

These e-mailed comments respond to the Notice of Drafting in the April 22, 2011 South Carolina State Register. In that notice the Department states it is considering clarifying the enterococci bacteriological indicator for the protection of recreational uses in Class SA, Class SB, and Shellfish Harvesting (SFH) waters and, where appropriate, to clarify implementation details for NPDES permits, ambient water quality assessment, and TMCL development. The comments are submitted on behalf of the City of Georgetown, which operates a Wastewater Treatment Plant under a NPDES permit issued by the Department. The City encourages the Department to better clarify the use of the enterococci bacteriological "indicator" as it is applied in NPDES permits.

The enterococci bacteria is an indicator bacteria, i.e., it is not itself harmful to human health. The enterococci standard was established by EPA in 2004 as part of the BEACH Act regulation to provide regulatory agencies with a numeric limit for determining if recreational users of saltwater areas (e.g. bathers) possibly were being exposed to unacceptable levels of various, harmful bacteria while in the water. The preamble to the EPA regulation makes it clear that EPA expected the regulatory agency to conduct testing of the recreational waters where the bathers were bathing to insure users were not being exposed to elevated levels of bacteria. The preamble does not require NPDES permits contain enterococci effluent limitations at this numeric level. Accordingly, instead of establishing a numeric limit for NPDES effluent limitations at the EPA beach protection concentration level, it is more appropriate to calculate and establish enterococci limits based on a wasteload allocation of the receiving water, just as other permit discharge levels are calculated.

The City of Georgetown's Wastewater Treatment Plant discharges into the Sampit River. While the City treats its wastewater for enterococci to a level ten times lower than its effluent limitation, because the City discharges to the Sampit River, it is required to hold its treated wastewater in summer months until it can be discharged during periods of ebb tide. While being held in an effluent holding pond, enterococci from natural sources such as animals and birds, are introduced into the pond, resulting in enterococci bacteria concentrations exceeding the NPDES effluent limit at no fault of the City. Although there are exceedences in the holding pond, there is no evidence that the enterococci levels in the Sampit River ever exceed the EPA standard. In fact, it appears from the Department's 2010 Monitoring Strategy that the Department does not monitor the Sampit River for enterococci levels.

R. 61-68 should be revised to require that enterococci effluent discharge levels be calculated based on wasteload allocations in the receiving water and should take into account the enterococci bacteria introduced into the environment through non-human sources.

Thank you for the Department's consideration of these comments.

Lee Zimmerman